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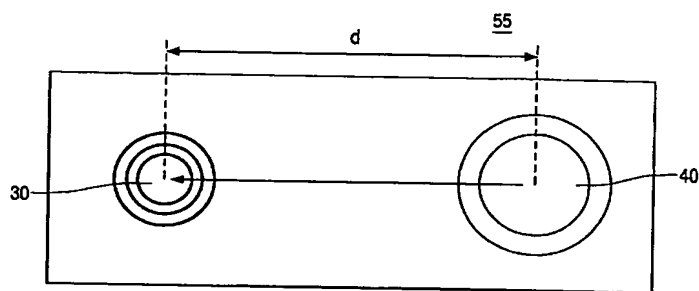
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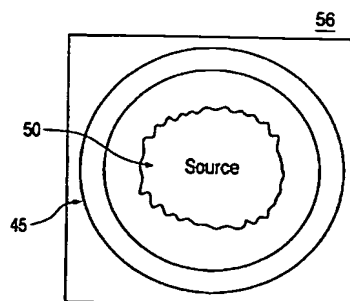
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[Continued on next page]

(54) Title: METHOD OF MEASURING THE PERFORMANCE OF AN ILLUMINATION SYSTEM



A



B

(57) Abstract: The performance of an illumination system in, for example, a lithographic projection apparatus can be measured accurately and reliably by means of a test object (55) comprising at least one Fresnel zone lens (30) and an associated reference mark, preferably a ring (40). By superposed imaging of these and detecting and evaluating the composed image (56), telecentricity errors and aberrations of the illumination can be measured.

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**Declaration under Rule 4.17:**

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT,

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A. CLASSIFICATION OF SUBJECT MATTER
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B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data, INSPEC, IBM-TDB

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P, X	WO 03/056392 A (JUFFERMANS CASPARUS A H ; DIRKSEN PETER; JANSSEN AUGUSTUS J E M) 10 July 2003 (2003-07-10) cited in the application claims 24-29	23-28, 39
X	US 4 585 342 A (TAUR YUAN ET AL) 29 April 1986 (1986-04-29) column 2, line 58 - column 6, line 11 figures	23-28, 39
X	US 6 048 651 A (BRUNNER TIMOTHY A ET AL) 11 April 2000 (2000-04-11) cited in the application column 1, line 21 - line 28 column 2, line 66 - column 5, line 65 figures	39
A		1, 14, 29, 37, 38

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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